

THE  
**DOE RUN**  
COMPANY

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November 2, 2001

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DEQ/ADMINISTRATION

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VIA CERTIFIED MAIL

John Young  
Director  
Air and Land Protection Division  
Missouri Department of Natural Resources  
P.O. Box 176  
Jefferson City, MO 65102-0176

Re: Order to Abate and Cease and Desist  
Dated September 25, 2001

Dear Mr. Young:

The Doe Run Company ("Doe Run"), based on what it believes are errors in fact and law, appealed the DNR's Order to Abate and Cease and Desist dated September 25, 2001 (the "Order"). Although subsequent correspondence from DNR has acknowledged that the Order is stayed by our appeal, the DNR has continued to send Doe Run letters delineating actions of Doe Run which the DNR believes are "violations" of the Order. See, e.g., the letters dated October 12, October 18, October 25, and October 31, 2001.

Even though Doe Run believes that the Order is illegal, Doe Run has endeavored to comply with as much of the Order as is possible and address all concerns raised. This letter is to advise the DNR as to what actions Doe Run has and is taking, including additional actions not addressed in the Order, and, for any actions not being taken, why Doe Run is not taking the actions. In addition, this letter addresses certain major apparent continuing misunderstandings by DNR concerning (1) the fact that fugitive emissions from the smelter complex, including those from lead concentrate handling and haulage, have already been addressed by the DNR and are specifically covered by state regulations and the lead SIP, (2) that the facts of this situation do not indicate that there is a continuing hazardous substance emergency under Missouri law, and (3) that, based on discussions with DNR personnel, it appears that the DNR does not know the location of Doe Run's property and where the Herculaneum public streets are located. Now that the DNR has accepted Doe Run's request to meet, Doe Run hopes that this letter may provide some background to the DNR and serve to focus future discussions.

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SUPERFUND RECORDS

I. DOE RUN IS COMPLYING WITH AS MUCH OF THE ORDER AS IT CAN

The following delineation of the Order's requirements and Doe Run's responses to those requirements are set forth by paragraph number in Section III of the Order, "Corrective Actions Required".

1.A. "Doe Run shall immediately cease all activities that cause fugitive dust to leave the property boundaries of the facility." -- As the DNR well knows from the intensive work done in connection with the State Implementation Plan ("SIP") for lead and the reception of the Herculaneum smelter's Title V air permit application, it is impossible to prevent all fugitive dust from leaving the property. Even if all operations were completely shut down there would still be some fugitive dust emissions. As is discussed in detail in Section II below, the DNR was aware of these fugitive emissions and has authorized the release of such fugitive emissions through specific regulations and the lead SIP approved by the Missouri Air Conservation Commission and the DNR.

1.B. Various requirements regarding washing and cleaning of vehicles. -- Doe Run has continued truck tire washing procedures for trucks hauling lead concentrate and other raw materials, including sand and limestone. These activities take place in a wheel washing facility previously constructed by Doe Run. Doe Run expanded the truck washing procedures to include washing of wheel wells and truck undercarriages and visual inspections of trucks before exiting the facility. Although Doe Run had initially believed that the DNR was only concerned with truck washing of lead concentrate trucks, after being advised by DNR that it wanted all trucks leaving the facility to be washed, Doe Run did establish a new wash station on its property south of the truck scale. Doe Run also paved the road on the east side of the fenced part of the facility (which road lies entirely within Doe Run property). Doe Run is currently continuing the washing of all vehicles leaving the facility, even though this paving significantly reduced any tracking of mud and other materials by trucks leaving the lead product loading dock and exiting the facility and vehicles hauling slag within Doe Run property. Doe Run does not have any authority over Herculaneum Sewer District vehicles which have a right to pass over Doe Run's property to access the sewer plant.

Although the Order requires Doe Run to wash the beds of lead concentrate trucks, Doe Run is only washing the beds after all haulage of lead concentrate is completed for that truck. Washing beds after every load could actually increase potential contamination along haul routes and could result in more material remaining in the trucks after each unloading. Most importantly, because the DNR has not made a single allegation that the bed of any securely tarped truck leaving the facility has been the source of any emissions of lead concentrate, the requirement is arbitrary, capricious, and not in accordance with law. The particular requirement that all trucks be "free" of lead concentrate is impossible, because all washing practices required by the DNR cannot remove every lead concentrate particle which may have adhered to the truck.

Regarding the washing of employee vehicles if the employee parking lots are "contaminated", Doe Run has cleaned and sealed the employee parking lots with an asphaltic material so any existing "contamination" has been encapsulated and so that future sweeping will be more effective. Other actions which Doe Run has taken to reduce fugitive emissions from the facility include constructing a new lead concentrate unloading facility so that lead concentrate is dumped over a concrete wall and the truck wheels never come into contact with concentrate. In addition, Doe Run has stopped its prior practice of using trucks with trailers for lead concentrate haulage. Although the use of truck and trailers reduced the number of trips that trucks had to drive through the City of Herculanum, the practice of first unloading the trailer and then unloading the truck might have caused a small amount of lead concentrate to be deposited on portions of the trailer.

2. Various requirements regarding cleaning of all hauling routes. -- Doe Run, before even receiving the Order, had conducted a vigorous cleaning of the haul routes in the City of Herculanum, including strong vacuuming and wet sweeping with a phosphate solution. Since the thorough cleaning of the haul routes in early September 2001, Doe Run has for the time being expanded the road cleaning requirements of the lead SIP to include the entire haul route (it was not required to sweep beyond the immediate vicinity of the smelter) and wet or dry sweeping every day, including weekends (it was not required to sweep on weekends).

In addition, Doe Run has carried out a number of activities not specified in the Order to reduce fugitive emissions from haul routes as well as from other sources in the smelter. Doe Run, as discussed above, has sealed the employee parking lots. Doe Run has put new asphalt on various parts of the plant property, including the area leading to the new concentrate unloading facility. Doe Run has patched certain areas of the street near the present Main Gate. Finally, Doe Run has physically loosened by hand and vacuumed material found in cracks in the street, curbs, and pavement in the areas on Station and Main Streets. All of these activities should reduce the amount of dust that could be re-suspended by vehicle traffic.

In regard to the additional requirements in the Order imposed if the haul roads are not cleaned to concentrations "substantially equivalent to non-hauling routes", this condition is impossible to attain. As the thorough cleaning under the watchful eye of EPA showed in early September, the porous surface of the asphalt roads in Herculanum will retain some lead-bearing particles. Just as residential soils in Herculanum vary in lead concentration depending on the distance from the smelter, it would be expected that the streets closest to the smelter would have the highest lead levels. Such would be the case whether they were haul roads or not.

Doe Run will evaluate the possibility of paving or sealing certain roads, but cannot do so until it has had a chance to evaluate the data concerning the location and concentration levels of the state's samples, which information the DNR has to date not provided to Doe Run. However, we should note that EPA has advised Doe Run that sampling of lead concentrations in street dust indicate that there have been significant

reductions in the amount of lead found on city streets. EPA has also advised Doe Run that, based on the air samplers established by EPA along the haul routes and downwind from the slag storage area, ambient lead concentrations do not show a significant adverse impact due to lead concentrate haulage or re-suspension of street dust by truck traffic. Samples so far for the monitoring station at School and Main Streets (which is the new monitoring station downwind from the slag storage area) actually show average lead concentrations that are an order of magnitude less than the National Ambient Air Quality Standard ("NAAQS") for lead.

3. "Doe Run shall submit a detailed plan to MDNR for concentrate delivery to the Herculanum smelter that does not involve the use of open dump trucks, either tarped or untarped." -- As stated above, Doe Run believes that securely tarped commercial carrier trucks meeting all the requirements of the U.S. Department of Transportation Hazardous Materials regulations (even if they do not meet the DNR's idea of "open" which DNR has not explained or defined for Doe Run) are protective of public health and welfare. Further, DNR's demands, absent a single allegation that securely tarped trucks hauling lead concentrate have resulted in any emissions of lead concentrate from the bed of the truck into the environment, are arbitrary, capricious, and not in accordance with law. Nevertheless, Doe Run is currently attempting to arrange for other forms of transportation of lead concentrate, including rail. However, this will take some time to implement and will not remove the need for some lead concentrates to be hauled by truck.

4. "Doe Run shall be required to fund indoor lead-contaminated residential dust characterization and remediation where necessary." -- Neither EPA nor the DNR has authority to require Doe Run to characterize and remediate all house dust in Herculanum. Nevertheless, Doe Run is aware that smelter emissions, together with other sources of lead, including lead paint, can contribute to house dust and will continue its past practice of helping in the loan of HEPA (High Efficiency Purifying Air Filter) vacuums to the citizens of Herculanum and will, where appropriate, assist in other cleaning of house dust.

5. "Doe Run shall not implement the plan required in Corrective Action three (3) above without review and written approval by MDNR." -- For a description of Doe Run's reasons for not submitting a transportation plan, see response to 3 above. Further, DNR has no authority to regulate commerce to and from the Herculanum smelter. Any change in transportation, including use of rail transport where possible does not require DNR approval. However, changing of modes of transportation may require construction of new loading or unloading facilities which would require approval of DNR with the length of such approval directly determining how soon truck traffic could be reduced in Herculanum.

6. "Doe Run shall comply with the additional work conditions of the September 17, 2001, letter from EPA and MDNR." -- Actually, the September 17<sup>th</sup> letter is from EPA, not the MDNR. Doe Run agreed to conduct the additional work and has complied with these requirements.

7. "Doe Run shall ensure that all waste water from the vehicle washing operations is contained and treated according to all applicable requirements of the Missouri Clean Water Law, including its implementing regulations." -- Water from the truck washing facility previously constructed by Doe Run is collected, treated, and discharged, in accordance with Missouri law. Water from the current water washing activities of trucks hauling lead metal from the facility (i.e., non-lead concentrate trucks) has been diverted to a sump and likewise has been collected, treated, and discharged in accordance with Missouri law.

8. "Doe Run shall immediately cease transport of lead concentrate and other hazardous substances along the public streets of Herculaneum if any of the corrective actions required under this Order are not taken within the timeframes prescribed herein." -- As noted in the response 1.A above, it is impossible to stop all fugitive dust from leaving the Doe Run property. Currently, the facility requires haulage of lead concentrates by truck to operate. Consequently, compliance with this requirement would force shut down of the Herculaneum smelter and possibly other Doe Run facilities with loss of jobs and severe economic impacts which could imperil the financial viability of the company.

Doe Run, through the institution of new practices and the construction of new facilities, has already addressed issues about potential exposure from lead concentrate haulage and has implemented additional measures to reduce overall emissions from our Herculaneum facility. A settlement conference where the technical and legal issues underlying your Order can be fully discussed is the quickest and surest way to resolve this matter. Doe Run has been investigating other ways to reduce emissions, including reductions in truck traffic, and Doe Run is willing to discuss such additional actions at this settlement conference.

## II. CONCENTRATE HANDLING AND HAULAGE IS SPECIFICALLY ADDRESSED IN THE LEAD SIP

7. After thorough negotiations regarding lead emissions from the Herculaneum smelter, a Consent Judgment dated January 3, 2001 was agreed to by Doe Run, the Missouri DNR, the Missouri Air Conservation Commission, and the Attorney General of Missouri. This Consent Judgment requires Doe Run to implement extensive (and expensive—Doe Run will have spent \$12 million by July 2002) control measures concerning the refinery department, the dross plant and refinery dross system, the blast furnace, and "road dust controls". Under the Consent Judgment, additional contingency control measures are required if the National Ambient Air Quality Standard ("NAAQS") for lead is not achieved by the required deadlines. Under the Herculaneum Multimedia Administrative Order on Consent finalized by EPA on May 21, 2001 ("Herculaneum AOC"), the additional contingency control measures are to be implemented over a certain schedule, regardless of attainment of the lead NAAQS. All the requirements of the Consent Judgment were approved and submitted by the Missouri Air Conservation Commission to the EPA as a revision of the State Implementation Plan ("SIP") for lead.

The "road dust controls" specifically addressed in the Consent Judgment state that Doe Run is to wash roadways in the plant, which procedures may be suspended when the temperature is below 39° F. The "road dust controls" also require Doe Run to continue to operate its existing street sweeping program on all paved roadways within and "around" the plant Monday through Friday, "weather permitting".

*obviously  
doesn't  
work*

The Consent Judgment also specifically requires Doe Run to adhere to a "Work Practice Manual". Under Missouri air pollution control regulation 10-CSR 10-6.120(3), a "Work Practice Manual" is the specific provision of Missouri law regulating "Lead Emissions From Other Than Stacks at All Installations". The Work Practice Manual attached as Exhibit B to the Consent Judgment specifically addresses the sinter plant, the blast furnace, the strip mill, the refinery, baghouses, and the "yard". The portion of the Work Practice Manual dealing with the "yard" specifically addresses fugitive emissions from identified paved and unpaved portions of the plant, from sinter cars, and "concentrate storage piles". Fugitive emissions from concentrate storage piles are specifically addressed by requiring Doe Run to chemically stabilize the storage piles once every six months. The Work Practice Manual also specifically states:

Temporary sources of dust on paved surfaces outside the plant due to spillage of materials will be addressed so as to limit the re-entrainment of those materials. Clean up to consist of those materials being loaded into transfer vehicles by either hand shoveling or should the need arise mechanized equipment. Final clean up will incorporate the use of floor sweep compound which will should adhere to the smaller particles, making them easier to remove.

In other words, the DNR, the Missouri Air Conservation Commission, and the Attorney General, all specifically considered that (1) there are fugitive emissions from concentrate handling and storage, (2) there would be "spillage" of lead-bearing materials on paved surfaces "outside the plant", and (3) there would be re-entrainment of dusts and other lead-bearing materials, and, yet, they all agreed that the control practices and work practices being required under the Consent Judgment, including "existing road dust controls" were "sufficient" to attain the NAAQS for lead and that they all "accepted" the agreed time table for completion of such control strategies as being "as expeditious as practicable".

In making these approvals and determinations, it is important to note that the DNR and the Missouri Air Conservation Commission clearly had full information regarding the sources and amounts of fugitive dust being emitted from the facility. An extremely detailed "Doe Run Lead Emission Inventory, Herculanum Smelter, Herculanum, Missouri, final revision dated June 20, 2000 (the "Lead Emission Inventory") addressed 50 separate sources of stack and fugitive emissions grouped into seven groups. The section dealing with the seventh group, "Outside Fugitives Department", using EPA emission factors, provides detailed emission data for the following sources:

Materials handling associated individually with dross, lead concentrate, sinter, slag, and "seconds", caused by transferring material from a truck or front-end loader to storage piles or pavement.

Wind erosion and entrainment of particles from paved and unpaved roads and individual stockpiles of dross, lead concentrate, sinter, slag, and "seconds".

"Kick-ups" of dust by tire action of trucks and automobiles on roadways and parking areas. Analysis individually addressed the following road segments: the Main Gate to Scale to Refinery Dock or North Strip Mill, Slag Tank to Storage Area (paved), Slag Tank to Storage Area (unpaved), NE corner from Sinter Plant to Storage, and General Plant Traffic including parking lots and Main Gate areas.

After calculating all emissions from the facility, this report determined that total lead emissions from the entire group of sources in "Outside Fugitives Department" was 1.97 tons per year, or only 1.4% of the total lead emissions from the facility.

*3940 Pounds*

The conclusion that materials storage and handling and re-suspension of dust due to traffic contributed only a small part of the total lead emissions leaving the facility, is also borne out by the extensive chemical mass balance study submitted as part of the lead SIP process. The "Source Apportionment of Herculaneum Ambient Lead Concentrations by Chemical Mass Balance Receptor Modeling" dated August 25, 2000 (the "Mass Balance Model") was a study which, by using measured chemical balance signatures for the various discrete sources of lead in the facility, could actually determine the relative contribution from sources within the plant to the ambient air monitors which would measure compliance with the lead NAAQS. This study was used by both Doe Run and the Missouri Air Conservation Commission to determine whether control measures on specific sources would actually be likely to result in measured attainment of the lead NAAQS.

After review of 70 individual sources of lead emissions, the study grouped them into eight categories, including separate categories for "lead concentrate fugitives" and "road dust". In the analysis of the concentrations of various elements collected at the air monitor which had shown the highest readings of lead and non-compliance with the lead NAAQS (the Broad Street monitor), it was determined that 58.99% of the lead was contributed by the Blast Furnace, 19.74% by the Refinery, 9.04% by the Sinter Plant, and 7.03% by the Dross Plant. With 94.8% of total lead emissions determined to be from these areas, that is why Doe Run, with the concurrence and approval of the DNR and the Missouri Air Conservation Commission, committed to spend \$12 million in these areas to achieve attainment in Herculaneum. The calculated contributions by lead concentrate and road dust were only 0.83% and 1.56%, respectively.

Given that the DNR (1) has known for years the potential amounts of fugitive emissions posed by materials-handling and re-entrainment of dusts on and off the facility, (2) has specifically regulated many sources of fugitive emissions by requiring control measures and work practices that recognize there will be fugitive emissions leaving the smelter property, (3) has concluded that no additional control measures are needed to address fugitive dust from materials storage and re-entrainment of dusts in and around the plant, and (4) has authorized stack emissions of 313,462 pounds per year of lead which leave the Herculanum facility (10 CSR 10-6.120(2)(B)) and specifically authorized fugitive emissions where a Work Practice Manual was in place (10 CSR 10-6.120(3)), Doe Run believes that the DNR has overreacted regarding (1) a very limited amount of lead concentrate found in the street just outside the Doe Run property and (2) the fact that there are fugitive emissions leaving the plant.

### III. THERE IS NO HAZARDOUS SUBSTANCE EMERGENCY IN HERCULANEUM

Doe Run believes it clear that there is not now, nor has there ever been, a "hazardous substance emergency" caused or otherwise associated with lead concentrate in Herculanum.

Missouri law recognizes that hazardous substances are ubiquitous (even "clean" native soil contains lead and other naturally occurring heavy metals) and that any "hazardous substance emergency" must represent the release of a hazardous substance in an amount sufficient to pose a significant risk to human health. Consequently, the DNR's regulation at 10 CSR 24-2.010(8) contains the following definition:

Hazardous substance emergency and emergency involving a hazardous substance—

(A) Any release of hazardous substances or extremely hazardous substances in quantities equal to or in excess of those determined pursuant to section 101(14) or 102 of the CERCLA of 1980 or section 304 of the Federal Emergency Planning and Community Right-to-Know Act of 1986.

Although the DNR apparently first noted the "pile" of material on August 21, the DNR was not concerned enough with the material to ask Doe Run to clean it up. It was finally on August 29<sup>th</sup>, that the EPA did identify a one-inch high "pile" of material in the street. However, the concentrations and dimensions of this "pile" reported by EPA show that the CERCLA reportable quantity for lead was not exceeded by the "pile" even if it had been released in a 24 hour period (actually there is no information regarding how long this material took to accumulate). In other words, the material was not in sufficient quantities to constitute a "hazardous substance emergency" under Missouri law. If DNR were to apply this "zero tolerance" stance to all hazardous substances released to the public, then the DNR would be declaring a "hazardous substance emergency" at every gas station in the State of Missouri.



More important to Doe Run than the above conclusions that Missouri law does not support the contentions of the DNR, is the fact that Doe Run is thoroughly convinced that the spilled material which was briefly located on the street, never posed any real risk to the people of Herculanum. Given the small amount of material, the fact that the form of lead found in lead concentrate is insoluble lead sulfide which has very low bioavailability (preliminary test results of Doe Run lead concentrate suggest 3 to 4% relative bioavailability), plus the remote possibility of any prolonged exposure by children due to the material's location near the main gate of the smelter with its heavy truck traffic, we believe it clear that no emergency, whether in the legal or practical sense, existed then or now.

Of course, any concern about this material being in a Herculanum street was immediately addressed by Doe Run once it was advised of its existence by the EPA. After being notified, Doe Run collected all visible materials left on the street and processed the material through its smelter. Certainly, any "emergency" that could have conceivably been presented by this small pile of material ceased to exist after Labor Day. Also, if the DNR, based on unavailability of information, was concerned that very high lead concentration material had migrated off of the haul roads to residences in Herculanum, results now in hand from testing ordered by EPA should clearly demonstrate that whatever small spillage might have occurred along the haul routes has not resulted in corresponding high concentrations in soils beyond the immediate edge of the haul routes.

#### IV. DNR HAS A MISCONCEPTION OF DOE RUN'S PROPERTY

Discussions with DNR personnel at Herculanum indicate that the DNR apparently believes that Doe Run's property ends at the fence around the southern and eastern portions of smelter complex. This has apparently led DNR to the conclusion that the road on the east side of the smelter complex is a "public" road. This is not correct.

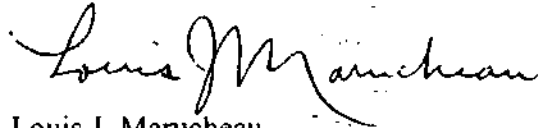
Almost all of the land between Main and Station Streets, Joachim Creek, and the Mississippi River is Doe Run property. One major exception is the area of the Herculanum Sewer District plant. This land was donated by Doe Run's predecessor company so a wastewater treatment plant could be built for the City of Herculanum. This plant is, in fact, entirely surrounded by Doe Run property. Although the Herculanum Sewer District has an easement whereby it may pass over Doe Run property to access its facility, there is no "public" road connecting the City of Herculanum with the sewer plant. In other words, the road on the east side of the fenced portion of the smelter complex which connects to the slag storage area is not a "public road".

In addition, the DNR should be advised that last year, a land exchange was negotiated between the City of Herculanum and Doe Run whereby, in exchange for 40 acres of land to be used by the City of Herculanum for future services to its citizens, the City of Herculanum agreed to vacate and transfer to Doe Run (1) Main Street from Curved Street to the intersection of Main and Station Streets and (2) Station Street from

the intersection of Main and Station Streets to where it ends in the plant in the area of the strip mill. The contract memorializing this agreement was executed on July 24, 2001. Pursuant to this agreement, the City has conveyed title to this property to Doe Run. Doe Run is permitted to fence off this area and prevent any access from the public.

If you or your staff have any questions about any information presented in this letter, please contact me at the above numbers.

Sincerely,

A handwritten signature in cursive script, appearing to read "Louis J. Maruchau".

Louis J. Maruchau  
Vice President Law

cc: D. Schuette